

## Comparison of Ferritin Level in Diabetic and Non-Diabetic Patients with Acute Myocardial Infarction

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### Abstract

**Aims:** Diabetes type II is one of the most common disorders of endocrine system in the world. Recently one hypothesis has been proposed about the role of increased ferritin in occurrence of diabetes type II. The present study investigated serum ferritin levels in diabetic and non-diabetic patients with myocardial infarction.

**Methods:** In this cross-sectional study on patients in the CCU ward of Imam Reza Hospital of Amol in 2011, 50 patients with diabetes type II and 50 non-diabetic patients amongst patients with acute myocardial infarction were entered in study purposefully. Cell Blood Count, Triglyceride, Cholesterol, LDL, HDL, Ferritin, Iron and TIBC were measured. Data analysis was performed by Chi-square, independent T, one sample T and logistic regression tests using SPSS 20 software.

**Results:** The risk of diabetes in women was 5.56 times more than men. The difference of mean serum ferritin levels between diabetic ( $170.60 \pm 126.36$ mg/dl) and non-diabetic ( $164.40 \pm 113.42$ mg/dl) was not statistically significant ( $p=0.7$ ). But the difference of mean serum Iron levels between diabetic ( $87.58 \pm 35.72$ mg/dl) and non-diabetic ( $60.44 \pm 20.38$ mg/dl) patients was statistically significant ( $p<0.0001$ ).

**Conclusion:** There was no relation between ferritin level of patients with diabetes type II and occurrence of acute myocardial infarction.

**Keywords:** Diabetes Mellitus; Ferritin; Myocardial Infarction; Iron